"Device for continuously measuring deformations in a tyre during the travel movement of a motor vehicle "

## **ABSTRACT**

A device (20) for continuously measuring deformations in a tyre (1), which is mounted on a rim (5), comprises at least one first emitter (7) of a first direct light beam (8), at least one first optical sensor (9) of the luminous intensity and at least one first reflecting element (13; 113) applied to a first portion (21) of an inner surface (4) of the tyre (1); the first emitter (7) is mounted on the rim (5) and is capable of sending the first direct light beam (8) towards the first reflecting element (13; 113); the first optical sensor (9) is also mounted on the rim (5) and is capable of receiving a first reflected light beam from the first reflecting element (13; 113), measuring a first prechosen physical parameter associated with the first reflected

light beam and providing a first signal representing the deformation affecting the tyre (1) along the first surface portion (21) during one

revolution of the tyre (1). (Fig. 1)